υ

degrees разев bases bases PMo1 TOME! Analysis of "table1 (slmb primer cyt L)" a 20-mer DNA Oligonucleotide(Sense) 25.0 9.0 0.0 1000.0 AC Parameters TAA 000 Hairpin loop stem length Formamide concentration Analysis 00000 concentration G Temperature concentration Palindrome length 2-oligo dimers 2-oligo bulges 2-oligo internals 3' End length Run length Structoral Analysis Summary / palindromes Delta Probe Salt nMol/A260 5.3 nMc1/A260 32.5 ug/A260 45.0 % -28.7 kCal/Mo1 kcal/Mol kCal/Mol degrees degraes degraes degrees hairpin loops bulge loops 6101.0 58.0 -140.6 48,8 66.2 -368.0 Oligonucleotide Analysis CCT οĒ of of Number Number Number Number CAA weight The thermodynamic O 3. End Delta Absorbance Absorbance Molecular Filter Tm S AT+GC Tm Percent 4 GC Th Delta H Delta G Delta 3

internal

Number

degrees bases bases bases bases PMo1 빠 Analysis of "table 2 (slmb primer cyt H)" a 20-mer DNA Oligonucleotide (Antisense) 25.0 0.6 1000.0 0.0 Analysis Parameters ATC 000 Hairpin loop stem length c∥Formamide concentration 00000 Delta G Temperature Concentration concentration 63.2 degrees C galt concentration 72.3 degrees C Formamide concentration degrees C 3' End length 5.6 mMol/A260 Run length 34.8 ug/A260 Palindrome length 2-oligo dimera 2-oligo bulges 2-oligo internals Structural Analysis Summary / palindromes Probe HUU -164.6 kcal/Mol -5.1 kcal/Mol KCB1/Mol 70.8 degrees CCL internal loops hairpin loops bulge loops base runs Oligonucleotide Analysis 6220.1 -419.9 dimers ΟĒ of of ٥f Jo Number Number Number Number Number Molecular weight Tm thermodynamic 3' End Delta Absorbance Absorbance Perdent GC Filter Im D AT+GC TH GC TH Delta H Dalta 9 Delta G

3 Analysis of "table 3 (slmb primer ITS2 F)" a 20-mer DNA Oligonucleotide(Sense) HU TIA THC AC りより TGA ACT S

degrees bases bases bases bases pMol 配列 25.0 0.6 1000.0 4 80 E Parameters Hairpin loop stem length Formamide concentration Analysis Delta G Temperature concentration concentration Palindrome length 3' End length Run length Probe Salt 54.2 degrees C 3.56.0 degrees C 3.56.0 degrees C 3.40.0 bg. 40.0 bg. -26.5 kCal/Mol degrees C degrees C degrees C degrees C kCal/Mol kCal/Mol 51.3 degrees 6098.0 -137.7 -365.B Oligonucleotide Analysis Molecular weight In thermodynamic 3' End Delta Absorbence Absorbance Parcent GC Filter Tm AT+GC Tm Delta H Delta B SC TE Delte G

000 2000 internals 2-oligo dimers 2-oligo bulges 2-oligo interna Structural Analysis Summary / palindromes internal loops hairpin loops bulge loops base runs dimers οĒ of. oĘ of of Number Number Number Number Number

(1) Analysis of "table 4 ( slmb primer ITS2-H)" a 24-mer DNA Oligonucleotide(Antisense) CHG TGA HU 4 CAT GA Ō TGC CHC ATA Ŋ

degrees pMol based bases bases bases пМо1 25.0 0.6 1000.0 0.0 Analysis Parameters Hairpin loop stem length Formamide concentration 3' End length G Temperature concentration concentration Palindrome length Run length Delta Probe Salt 0000 nMo1/A260 kCal/Mol kcal/Mol -5.2 kCal/Mol dogrees degrees degrees degreas ug/A260 Πe 57.8 7.00.0 7.00.0 7.00.0 8.24 8.35 8.35 8.35 -169.5 -442.0 Oligonucleotide Analysis weight In thermodynamic U 3' End Delta Absorbance Absorbance Percent GC Molecular Filter Tm AT+GC TH Delta H · GC TH Delta G Delta S

00000 2-oligo incernals 2-oligo dimers 2-oligo bulges palindromes internal loops hairpin loops of bulge loops base runs dimers of of Number Number

Number

Number

Number

Structural Analysis Summary

000

ю

bases bases

Hairpin loop stem length

-36.5 kCal/Mol -169.9 kCal/Mol

-4.9 kCal/Mol

-439.7

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3' End Delta

Percent GC

Dalta G Delta S Delta

Ū (1) degrees bases bases pMol mMo1 Analysis of "table 5 ( slmb primer pro-L ) " a 24-mer DNA Oligonucleotide(Sense) AA 0.6 0.0 7 25.0 400 Parameters TCA degrees c salt concentration degrees c Formamide concentration degrees c 3' End length Analysis Delta G Temperature c||Probe concentration AAG Palindrome length 60.2 degrees C Salt concern
72.2 degrees C Formamide co
70.0 degrees C 3' End lengt
4.3 nMol/A260 Run length
31.4 ug/A260 Palindrome 1
45.8 % degrees 67.8 7354.9 Oligonucleotide Analysis よりひ HOL Molecular weight Tm thermodynamic CAG Absorbance Absorbance Filter Im AT+GC II GC Tan IJ

000 00000 2-oligo internals Structural Analysis Summary 2-oligo dimers 2-oligo bulges / palindromes internal loops hairpin loops bulge loops base runs dimera of of o f of Number Number Number Number Number

(1) Analysis of "table 6 ( slmb primer Dloop-H)" a 23-mer DNA Ollgonucleotide(Antisense) CAC AAA CA ATC ATC ATA 5

degrees basad bases bases bases pMol HWO. 9 . 0 25.0 1000.0 0.0 Analysis Parameters Hairpin loop stem length Formamide concentration 3' End length Delta G Temperature concentration concentration Palindrome length Run length Probe Salt Ü ü degrees C nMol/A260 -4.6 kcal/Mol -32.9 kcal/Mol degrees degrace kcal/Mol degrees ug/A260 53.6 4.3 34.8 -163.3 66.4 7033.7 Oligonucleotide Analysis -429.7 Molecular weight thermodynamic 3' End Delta G Absorbance Percent GC Absorbance Filter In AT+CC Tm S E Delta G Delta Dolta

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals / palindromes internal loops halrpin loops bulge loops base runs dimers of ٥£ O.F Ô Ö Mumber Number Wumber Number

Structural Analysis Summary

| (Sense)  3 1  25.0 degrees C 0.6 pMol  | 25 25 25 25 25 25 25 25 25 25 25 25 25 2   |  |
|--|--|--|
| (b) deg composition and compos | 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |  |
| CA 3:  CA 3:  meters  25.0 degr  0.6 pMol  | 0<br>0<br>7<br>4<br>8<br>8   |  |
| MA Oligonucleotide (  CGT CA  Analysis Parameters ature ation 100  | ration   | 0 000  |
| Analysis of "table 7 ( slmb primer ROD-L)" a 20-mer DNA Oligonucleotide (Sense)  S' CCT GGT AGA GTT CGC CGT CA 3  Oligonucleotide Analysis  ular weight  strong for the grane concentration  strong for the grane concentration  125.0 de for the grane concentration  | degrees C 3' End length nMol/A260 Run length ug/A260 Raindrome length kCal/Mol kCal/Mol                  | ummary nes iimers vulges   |
| GTT  GTT  Delta  C Probe  C Probe  C Salt  | ) U o  | Structural Analysis Summary runs oin loops / Palindromes is / 2-oligo dimers i loops / 2-oligo bulges inal loops / 2-oligo internals |
| AGA GTT AGA GTT  AGA GTT  AGA GTT  89.0 67.4 degrees C Probe 59.8 degrees C Forman   | 64.0 degraces<br>5.3 nMol/A260<br>33.0 ug/A260<br>60.0 %<br>-34.7 kCal/Mol<br>154.3 kCal/Mol<br>394.4 eu | Structural base runs hairpin loops dimers bulge loops internal loops   |
| T GGT A cleotide Analysis 6189.0 67.4 59.8   | 64.0<br>8.3<br>33.0<br>60.0<br>60.0<br>134,7<br>124.2<br>1394.4  | of base of dimer of dimer of bulge   |
| # D 2  | IJ   | Number<br>Number<br>Number<br>Number<br>Number   |
| Analysis  5   C(  01190  Wolecular weight  Tm thermodynamic Filter Im  GC Im  Antec Im   | G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G<br>G              |  |

degraes (1) bases bases bases Analysis of "table 8 ( slmb primer ROD-H )" a 22-mer DNA Oligonucleotide(Antisense) PMO1 TMo1 H 25.0 1000.0 Parameters ひひひ 000 Hairpin loop stem length C Formamide concentration Analysis TOL 00000 Delta G Temperature concentration concentration Palindrome length 2-oligo dimers 2-oligo bulges 2-oligo internals 3' End length Structural Analysis Summary CAT Run length / palindromes Probe c||salt TAT 64.0 degrees C 3 5.2 mol/A260 R 34.9 ug/A260 P 45.5 % HCal/Mol H -35.4 kCal/Mol 58.8 degrees 69.5 degrees -7.9 kCal/Mol 66.4 degrees bulge loops internal loops hairpin loops CCT base runs 6738.4 Analysis dimera GTT ٥Ē ٥Ē ο£ o. Oligonucleotide Number Number Number Number Number CGT Molecular weight Tm thermodynamic Ċ Delta S 3' End Delta Absorbance Absorbange Percent GC Filter In AT+GC TE 4 GC 11 Delta G Dolta H S

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(1) Analysis of "table 9 ( LRMB primer 16S-L )" a 21-mer DNA Oligonucleotide(Sense) CHC TLL ATG AGT CCA CAG CAC 1

degrees basea bases bases bases рмој mMo1 25.0 9.0 0.0 1000.0 Parameters Hairpin loop stem length Formamide concentration Ana.lysis concentration G Temperature concentration Palindrome length 3' End length 68.9 degrees C Formamide c 62.0 degrees C 3' End leng 5.1 nMol/A260 Run length 33.0 ug/A260 Palindrome Delta Probe Salt ט ט -31.9 kCal/Mol -152.3 kcal/Mol -4.9 kCal/Mol degrees dagrees 10 47.6 Oligonucleotide Analysis weight To thermodynamic O 3. End Delta Absorbance Absorbance Percent GC Molegular Filter Im AT+GC Tm Delta G Delta Delta

000 0000 2-oligo dimers 2-oligo bulges 2-oligo internals / palindromes internal loops hairpin loops bulge loops Number of base runs dimers õ of o. οf Number Number Number Number

Analysis Summary

Structural

Analysis of "table 10 ( LRMB primer 165-H )" a 18-mer DNA Oligonucleotide (Antisense) CAG AGT AGC THC TAG TCG D)

25.0 degraes bases bases bases bases pMol mMol 0.6 0 Parameters Halrpin loop stem length 64.5 degrees C Formamide concentration 54.0 degrees C 3' End length 5.7 nMol/A260 Run length Delta G Temperature Probe concentration concentration Palindrome length Run length CSALE 31.8 ug/A260 50.0 & -25.3 kCal/Mol -123.0 kcal/Mol degrees degrees -320,5 5594.7 Oligonucleotide Analysis Moleculer weight the rmodynamic Absorbance Absorbunce Percent GC Filter Tm AT+GC Th Delta G 1 30 m Delta

Number of base runs / palindromes 0 / 0
Number of hairpin loops / 2-oligo dimers 0 / 0
Number of dimers / 2-oligo bulges 0 / 0
Number of bulge loops / 2-oligo bulges 0 / 0
Number of internal loops / 2-oligo internals 0 / 0

-4.9 kCal/Mol

ø

3' End Delta

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Analysis of "table 11 ( LRMB primer 125-L )" a 19-mer DNA Oligonucleotide (Sense) (1) AGA CHC TCG C Ŭ TIC CTA IJ

dagrees bases bases bases pMol mMo1 Parameters 25.0 0.6 0.0 400 Hairpin loop stem length Formamide concentration Analysis Delta G Temperature concentration concentration Palindrome length 3' End length Run length Probe Salt U υç nMo1/A260 -4.6 kCal/Mol. kcal/Mol kcal/Mol degrees ug/A2 60 degrees degrees degrees 60.0 6.0 34.6 57.9 54.5 -31.8 -146.6 5779.8 62.1 Analysis -378. Oligonucleotide weight thermodynamic Ö 3' End Dalta Ç Absorbance Absorbance Moleguler AT+GC Tm Percent S E Delta G Delta H Dolta

0 000 00000 internals Structural Analysis Summary 2-oligo dimers 2-oligo bulges / palindromes 2-oligo internal loops hairpin loops bulge loops Number of base runs dimers of o f O. J C Number Number Number Number

3 Analysis of "table 12 ( LRMB primer 125-H )" a 23-mer DNA Oligonucleotide(Antisense) CTT CAC CCT ATC ATC TCC GCC S

degrees bases разев bases pMol EMO1 25.0 9.0 1000.0 0.0 Analysis Parameters Formamide concentration concentration Delta G Temperature concentration 3' End length Run length Probe Salt 63.2 degrees C F 75.3 degrees C 7 72.0 degrees C 3 5.1 nMol/A260 R 34.9 ug/A260 R 56.5 % ט ט degrees 70.8 Analysis Oliganucleotide

Molecular weight Tm thermodynemic

Filter Tm AT+GC TB

GC Th

Absorbance Absorbance Percent GC

Rairpin loop stem length

-38,9 kCal/Mol -174,6 kCal/Mol -5.1 kCal/Mol

9

-448,9

Ü

3' End Delta

Delta 9

Dolta Dalta

Palindrome length

Structural Analysis Summary / palindromes base runs

000 0000 internals 2-oligo dimers 2-oligo bulges 2-oligo interna internal loops hairpin loops bulge loops dimers of of of οf Number Number Number Number Number Oligonucleotide (Antisense) DH CHC Analysis of "table 13 ( DTMB primer 165-H )" a 20-mer DNA Ŭ CGT CTC D

degrees bases bases bases bases pMol 是(0) 0.6 25.0 4.00 U Parameters Hairpin loop stem length Formamide concentration Analysis Delta G Temperature concentration concentration Palindrome length 3' End length Run length Probe טט mMc1/A260 υ υ 6.1 nMc1/A260 37.2 ug/A260 70.0 % -37.1 KCal/Mo1 -157.8 kCal/Mo1 kcal/Mol degrees degrees degrees degrees 68.0 -7.9 64.1 -398.9 6052.0 76.4 Oligonucleotide Analysis Molecular weight thermodynami Delta Absorbance Absorbance AT+GC TH Delta H Delta S Percent 8 1 1 1 Filter Delta

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary palindromes internal loops hairpin loops bulge loops base runs dimers οť o. of ٥Ę Number Number Humber Number

υ degrees Dases bases bases bases 3 TOM: pMol (DTMB primer 16s-L)" a 22-mer DNA Oligonucleotide (Sense) 0.6 1900.0 25.0 B Parameters GTT 000 0 Hairpin loop stem length degrees c Probe concentration degrees c Salt concentration degrees c Formamide concentration degrees c 3' End length Analysis TOI 00000 G Temperature Palindrome length 2-oligo bulges 2-oligo internals Structural Analysis Summary 2-oligo dimers ATG Run length / palindromes Delta CTT mol/A260 kCal/Mol -171.5 kcal/Mol -4.9 KCA1/Mol 67.9 degrees ug/A260 internal loops hairpin loops bulge loops 10 base runs 60 . 4 6 . 6 . 6 6 . 4 . 6 6 . 4 . 6 7 . 6 . 6 7 . 7 -36.9 -444.2 6756.4 Oligonucleotide Analysis Ū dimera οţ οĒ Analysis of "table 14 οľ οţ COL Number Number Number Number Number AAA Molecular weight Th thermodynamic Ü 3' End Delta Absorbance Percent GC Absorbande Filter Tm AT+GC Im Delta H Delta G 4 GC 17 Delta Ŋ

**(**1) Analysis of "table 15 ( DIMB primer 12S-H )" a 22-mer DNA Oligonucleotide(Antisense) CHH TIC CTA HU Ü CHH ひひひ CAT S

degrees bases **bases** bases bases пМо1 pMol 25.0 9.0 0.0 1000.0 Parameters Hairpin loop stem length Formamide concentration Analysis Delta G Temperature concentration concentration Palindrome length 61.2 degrees C Formamide concenta 71.3 degrees C Formamide conc 66.0 degrees C 3' End length 5.3 nMol/A260 Run length 35.5 ug/A260 Palindrome ler 50.0 % C Probe -37,5 kCal/Mol -172.0 kCal/Mol kcal/Mol 68.8 degrees 6723.4 -444.3 Oligonucleotide Analysis weight To thermodynemic Absorbance Absorbance Percent GC Molecular Filter Tm AT+GC TH Sch Delta G Dolta H Dolta

000 00000 internals 2-oligo dimers 2-oligo bulges 2-oligo intern / palindromes incernal loops hairpin loops bulge loops base runs dimers οĘ 벙 οĘ οf Number Number Number Number Number

Structural Analysis Summary

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3' End Delta

degrees bases bases bases bases pMol mMo1 Analysis of "table 16 ( DPMB primer 12S-L )" a 19-mer DNA Oligonucleotide (Sense) 25.0 0.6 1000,0 TCA 000 60.0 degrees C Formamide concentration
60.0 degrees C 3 End length
33.4 ug/A260 Run length
57.9 %
-33.9 kCal/Mol
Heirpin loop stem length
-152.5 kCal/Mol Analysis 0000 G Temperature concentration concentration GTA 2-oligo internals Structural Analysis Summary Z-oligo dimers Z-oligo bulges / palindromes ひじじ Delta Probe Salt 65.8 degreem 58.2 degrees kCal/Mol internal loops hairpin loops bulge loops base runs Oligonucleotide Analysis dimers ATC Number of of οĒ O. ij Number Number Number Number TCT Molecular weight Tm thermodynemic Ø 3' End Delta Absorbance Absorbance Percent GC Ar+GC Tm Dalta H Delta G Delta s Filter

| isense)   | -<br>M                           | 0 degrees (6 pMol  | 0 &<br>7 bases<br>4 bases              | 8 bases<br>3 bases                    |                               |   |  |
|---|----------------------------------|--|--|---------------------------------------|-------------------------------|---|--|
| 5 GGC GAT TCT ACG GCA CGC CAT TCT ACG GCA CGC CGC CAT TCT ACG GCA CGC CGC CGC CGC CGC CGC CGC CGC |                                  | 12.8 degrees C Probe concentration 0.6 pMol  | 0.0                                    | kcal/Mol   Hairpin loop stem length 3 | ~468.6 eu<br>~12.8 kCal/Mol_[ | Number of base runs / palindromes 0 / 0 | Number of bulge loops / 2-oligo dimers 0 / 0  Number of internal loops / 2-oligo bulges 0 / 0  O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| 5 GGC G   | Oligonucle,<br>Weight<br>dynamic | Filter The GC The GC The Art-GC The Art-GC The Art-GC The Grant Th | Absorbance<br>Absorbance<br>Percent GC | Dolta H                               | 3' End Delta G                | Number<br>Number<br>Number              | Number   |

bases bases bases bases

0.0 1000.0

pMol EMO)

(1) Analysis of "table 18 ( TCMB primer 165-L )" a 22-mer DNA Oligonucleotide(Sense) GTC TAT CHC CIC CIG AAA 5

degrees 25.0 Parameters Analysis G Temperature Delta 6758.5 Analysis Oligonucleotide weight Tm thermodynamic Molecular

Formamide concentration concentration concentration Palindrome length degrees C Salt concentrated Germanide Concentrated C 3' End length nMol/A260 Run length c Probe degroos ug/A260 67.6 62.0 31.7 40.9 4.7 60.7 53.1

> Absorbance Absorbance Percent GC

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AT+GC

Filter Tm

90 11

kCal/Mol kCal/Mol KCB1/Mol 10 -153.3 14.1 -400.5

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3' End Delta

Delta H Delta S

Dalta G

Hairpin loop stem length

Structural Analysis Summary / palindromes base runs Number of

0

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals internal loops hairpin loops bulge loops dimers of õ Mumber of Number of Mumber Number

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Analysis of "table 19 ( TCMB primer 12S-H )" a 22-mer DNA Oligonucleotide(Antisense) CCT HHC A COCA CAG ATT せいい L()

dagrees bases bases bases bases pMo1 mMo1 25,0 9.0 0.0 1000.0 Analysis Parameters Kairpin loop stem length Formamide concentration Delta G Temperature Probe concentration concentration Palindrome length 3' End length Run length Salt degrees C 3 degrees C 3 U U 74.6 degrees C 67.0 degrees C 75.0 degrees C 70.0 degrees C 5.1 nMol/A260 34.2 ug/A260 59.1 % -7.9 kcal/Mol -176.0 xcal/Mol 6671.4 Oligonuclentich Analysis Molecular weight Im thermodynamic U 3' End Delta Absorbance Absorbance Percent GC Filter Im AT+GC TE GC TH Delta G Delta H Delta 9

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals / palindromes internal loops hairpin loops bulge loops base runs dimers o f οĘ o. Number Number Number Number Number

Structural Analysis Summary

degrees bases bases bases bases pMol m **IMO**1 21-mer DNA Oligonucleotide (Sense) 25.0 0.6 1000.0 ACA Parameter's 000 Hairpin loop stem length ACT c|Formamide concentration Analysis 00000 concentration G Temperature concentration Palindrome length 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary ATA degrees c||3' End length Run length / palindromes Delta c|Probe Analysis of "table 20 ( TCMB primer 125-L )" CAG nWo1/A260 -31.7 kCal/Mol kcal/Mol -3.9 kCal/Mol 66.9 degrees ug/A260 degrees degrees internal loops hairpin loops bulge loops GCC base runs 51.6 42.9 60.0 4.8 30.6 -159.4 59.2 Oligonucleotide Analysis dimers AAA of of o t Number Number Number Number CCT Molecular weight Th thermodynamic Ü 3' End Delta Absorbance Percent GC Absorbance Filter Im AT+GC Tm Delta S Dalta G 4 GC Th Ŋ Delen

| Analy             | sis of | "table 21                | Analysis of "table 21 (PCMB primer 16S-H )" a 22-mer DNA Oligonucleotide (Antisense) | "(H-S91              | a 22-mer DN                  | M Oligonuc | leotide (An         | tiser       | (es)         |
|-------------------|--------|--------------------------|--|----------------------|------------------------------|------------|---------------------|-------------|--------------|
| 5 -               | CGT    | GTT                      | GTT CTG ATG ATG TGC T  | ATG                  | ATG                          | ATG        | TGC                 | H           | m            |
|                   | Oligon | Oligonucleotide Analysis | Analysis   |                      |                              | Analysis   | Analysis Parameters |             |              |
| Molecular weight  | weight |                          | 6967.5   | De                   | Delta G Temperature          | rature     | 2.                  | 5.00        | 25.0 degrees |
| The thermodynamic | Tranic |                          | 64.7 de  | degrees C Pr         | c Probe concentration        | ration     |                     | 0.6 pMol    | Mol          |
| Filter Im         |        |                          | 57.1 de  | grees C Sa           | degrees C Salt concentration | ration     | 1000                | 1000.0 mMol | Mol          |
| F GC TH           |        |                          | 69,5 de  | degrees C Fo         | Formamide concentration      | centration |                     | 9 0.0       |              |
| AT+GC TE          |        |                          | 64.0 de  | grees C 3'           | degrees C 3' End length      |            |                     | 7 P         | bases        |
| Absorbance        |        |                          | 4.9 nM   | nWol/A260 Run length | in length                    |            |                     | 4<br>D      | bases        |
| Absorbance        |        |                          | 33.4 ug  | ug/A260 Pa           | Palindrome length            | ngth       |                     | Д<br>8      | bases        |
| Percent GC        |        |                          | 45.5 B   |                      | Hairpin loop stem length     | stem lengt | _                   | д<br>Э      | bases        |
| Delta G           |        |                          | -33.0 kCal/Mol   |                      | 1                            |            |                     |             |              |
| Delta H           |        |                          | -150.2 kc  | kCal/Mol             |                              |            |                     |             |              |
| Delta 3           |        |                          | -385.9 eu  |                      |                              |            |                     |             |              |
| 3' End Delka      | (b)    |                          | -6.3 kCal/Mol  | al/Mol               |                              |            |                     |             |              |
|                   |        |                          | Struct   | ural Analy           | Structural Analysis Summary  |            |                     |             |              |
|                   |        | Number of                | base runs  | / pal                | / palindromes                | 0 / 0      | 0                   |             | -            |
|                   |        | Number of                | hairpin loops  | sdc                  |                              | 0          |                     |             |              |
|                   |        | Number of                | of dimers  | `                    | 2-oligo dimers               | / 0        | 0                   |             |              |
|                   |        | Number of                | pulge loops  | `                    | 2-oligo bulges               |            | 0                   |             |              |
|                   |        | Number of                | of internal loops  | \                    | 2-oligo internals            | als 0 /    | 0                   |             |              |
|                   |        |                          |  |                      |                              |            |                     |             |              |

| Analysis of "table 22 ( PCMB primer 16S-L )" a 19-mer DNR Oligonucleotide (Sense)  5 | 825 |  | Number of hairpin loops | ` | Number of bulge loops / 2-oligo bulges 0 / 0 |  |
|--|-----|--|-------------------------|---|--|--|
|--|-----|--|-------------------------|---|--|--|

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Analysis of "table 23 ( PCMB primer 12S-H )" a 22-mer DNA Oligonucleotide (Antisense)

ee a m Analysis Parameters TAC CCC ATG ACT CTL GAA GCT Ŋ

| Olidonucieottae Analysia                | de Analysia                 |   |              |
|---|-----------------------------|---|--------------|
|   |                             | Delta G Temperature                     | 25.0 degrae: |
| MOTOCOTURE MOTOUR                       |                             |   | ניאני ע ס    |
|   | 60.3 degrees C              | 60.3 degrees C Probe concentration      | 1000         |
|   |                             |   | TOME O OUG   |
| Filter Th                               | 52.7 degrees C              | 52.7 degrees cast concentration         |              |
| Į.                                      | 69.5 degrees C              | 69.5 degrees C  Formamide concentration | P 0.0        |
|   |                             |   | 7 bases      |
| AT+GC TH                                | P4'0 degrees C 3 End render | כום דבוות יו                            | ·            |
|   | 5.0 nMol/A260 Run length    | Run length                              |              |
|   | 0,017                       | 11-1-11-11-11-11-11-11-11-11-11-11-11-1 | 8 02553      |
| Absorbance                              | 33.6 ug/A260                | Fallmarame renden                       |              |
| 1                                       | 4. n. 4.                    | Hairpin loop stem length                | 3 04363      |
| Fercence or                             |                             |   |              |
| Delta G                                 | -32.7 kCal/Mol              | -                                       |              |
|   | -164.7 kCal/Mol             |   |              |
| משרבע ני                                |                             |   |              |
| Delta S                                 | -435.2 eu                   |   |              |
| 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | -6.6  kCal/Mol              |   |              |
| a water but .f                          |                             |   |              |
| •••                                     |                             |   |              |
|   | Structural An               | Structural Analysis Summary             |              |
|   |                             |   |              |

000

2-oligo dimers 2-oligo bulges 2-oligo internals

of bulge loops of internal loops

Number of base runs Number of hairpin loops Number of dimers

Number of Number of Number of

Number

00000

0

/ palindromes

| Analys           | is of "tak | le 24 ( PC               | 'B primer                    | 12S-L )" a | Analysis of "table 24 ( PCMB primer 12S-L )" a 20-mer DNA Oligonucleotide (Sense) | Oligonucl           | eotide (Sen | se)            |
|------------------|------------|--------------------------|------------------------------|------------|---|---------------------|-------------|----------------|
| Ŋ<br>Ţ           | CCG        | ATT                      | GAC                          | CCC        | ATT GAC GCC GAA CTA TG  | CTA                 |             | 3 -            |
| Ö                | ligonucleo | Oligonucleotide Analysis | sis                          |            | BUK   | Analysis Parameters | meters      |                |
| Molecular weight | ght        | 919                      | 6182,1                       | Delta      | Delta G Temperature   | ire                 | 25.0        | 25.0 degrees C |
| Im thermodynamic | unic       | S                        | 8.1 degree                   | a C Probe  | 68.1 degrees c Probe concentration  | no                  | 0.6 pMol    | pMo1           |
| Filter Tm        |            | 9                        | 0.5 degree                   | a C Salt   | 60.5 degrees C Salt concentration   | no.                 | 1000.0 mMol | шМо.1          |
| * GC TB          |            | 7                        | 0.3 degree                   | a C Forman | 70.3 degrees C Formamide concentration  | ration              | 0.0         | -              |
| AT+GC TB         |            | 9                        | 62.0 degrees C 3' End length | a c 3' End | length  |                     | 7           | Dases          |
| Absorbance       |            |                          | 5.3 nMol/A260 Run length     | 260 Run le | ngth  |                     |             | Dases          |
| Absorbance       |            | m                        | 32.5 ug/A260                 |            | Palindrome length   |                     | . 00        | Dales          |
| Percent GC       |            | S.                       | 55.0 %                       | Halrpi     | Hairpin loop stem length  | 1 Length            | (F)         | 00000          |
| Delta G          |            | E -                      | -35.6 kCal/Mol               |            | •   | •                   |             |                |
| Delta H          |            | -15                      | -159.4 kCal/Mol              | Lo.        |   |                     |             |                |
| Delta 8          |            | 0 7                      | -408.5 eu                    |            |   |                     |             |                |
| [3' End Delta G  | U          | 1                        | -4.1 KCal/Mol.               | 0.1        |   |                     |             |                |

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary / palindromes base runs
thairpin loops
dimers
bulge loops
internal loops 0 0 f Number Number Number Number Number

Analysis of "table 25 ( SLMB primer 168-H )" a 18-mer DNA Oligonucleotide (Antisense) Ŋ

TGG

UHU

ひりひ

TAA

GCA

TA

|  |   |  | 1                                       |
|--|---|--|---|
| Oligonucle                             | Oligonucleotide Analysis                | Analysis Parameters                      | meters                                  |
| Molecular weight                       | 5579.7                                  | Delta G Temperature                      | 25 0 2021904                            |
| The thermodynamic                      | K1 4 4200000                            |  | ייי איניייייייייייייייייייייייייייייייי |
|  | O REDITION                              | carrage of robe concentration            | O.6 pMol                                |
| FALCOR IM                              | 53.8 degrees C                          | 53.8 degrees C∥Salt concentration        | LONG COCCL                              |
| C TH                                   | 65.8 degrees C                          | C. C | TOTAL 0:0001                            |
|  |   | TOTTOTION CONCENTRACTOR                  | P 0.5                                   |
| 日に つきtree                              | 56.0 degrees C                          | 56.0 degrees C 3' End length             |   |
| Absorbance                             | C + C + C + C + C + C + C + C + C + C + |  | מים מים                                 |
|  | 5.9 nMo1/AZ60  Run length               | Run length                               | 4 0000                                  |
| Absorbance                             | 32.8 ug/A260                            | Palindrome length                        |   |
|  |   | F 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | משמע ס                                  |
| יייייייייייייייייייייייייייייייייייייי | e o no                                  | Hairpin loop stem length                 |   |
| Delta G                                | -31.0 kCal/Mol                          |  |   |
| Delta K                                | -143.5 XCR1/MO                          |  |   |
| Delta 9                                | -370.2 en                               |  |   |
| 0 4 10C 7CB . E                        |   | -  |   |
|  |   |  |   |

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary palindromes bulge loops internal loops of halrpin loops
of dimers
of bulge loops
of internal loops Number Number Number Number

Analysis of "table 26 ( SLMB primer 16S-L )" a 22-mer DNA Oligonucleotide (Sense) H ATC TAC CTA I)

| weight 6639.4<br>Framic 52.4 degrees C  |  |             |                |   |
|---|--|-------------|----------------|---|
| .4 degrees                              | Delta G Temperature                    | 25.0        | 25.0 degrees ( | U   |
|   | 52.4 degrees C Probe concentration     | 9.0         | 0.6 pMol       | _   |
| .8 degrees                              | 44.8 degrees C Salt concentration      | 1000.0 mMol | mMol           |   |
| .6 degrees                              | 67.6 degrees C Formamide concentration | 8 0.0 e     | ø              |   |
| .0 degrees                              | 62.0 degrees C 3' End length           |             | 7 bases        | _   |
| .9 nMol/A260                            | 4.9 nMol/A260 Run length               | •           | bases          |   |
| 32.8 ug/A260                            | Palindrome length                      | 60          | E B B B G      |   |
| 40.9 %                                  | Hairpin loop stem leng                 | Jeh 3       | bases          | _   |
| -27.6 kCal/Mol                          |  |             |                |   |
| -146.8 kCal/Mol                         |  |             |                |   |
| -392,2 ou                               |  |             |                |   |
| -3.8 kCal/Mol                           |  |             |                | _   |
| 8 6 9 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | 1/A260<br>al/Mol<br>al/Mol             |             |                | Palindrome length B<br>Hairpin loop stem length 3 |

000

2-oligo dimers 2-oligo bulges 2-oligo internals

f hairpin loops f dimers f bulge loops f internal loops

of

Number Number Number Number

Structural Analysis Summary

/ palindromes

Number of base runs

of

00000

Analysis of "table 27 ( SLMB primer 12S-H )" a 19-mer DNA Oligonucleotide (Antisense) m CHC TAA D H ACT ひひひ L)

degrees bases bases bases bases pMol mMo1 1000.0 0.0 25.0 ው መ መ Analysis Parameters Rairpin loop stem length degrees C Salt concentration degrees C Formanide concentration degrees C 3' End length G Temperature concentration Palindrome length Run length Delta Probe υ 6.1 nMc1/A260 35.0 ug/A260 57.9 % -29.4 kCal/Mol kCal/Mol 58.4 degrees -5.4 kCal/Mol 69.7 degrees 60.0 degrees 50.8 -138.5 5708.8 Oligonucleotide Analysis Molecular weight Tm thermodynamic 3' End Delte Absorbance Absorbance Filter Im AT+GC TH GC TE Percent Delta G Delta s Delta

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary / palindromes internal loops hairpin loops bulge loops base runs dimers of 矿 ο£ οĘ οĘ Number Number Number Number Number

Analysis of "table 28 ( SLMB primer 12S-L )" a 21-mer DNA Oligonucleotide(Sense) (1) GCT TOL TCA CAA CTA TAA 10)

degrees bases bases bases bases pMol 0,6 1000.0 0.0 25.0 400 Parameters Halrpin loop stem length Formamide concentration Analysis G Temperature concentration concentration Run length Palindrome length 3' End length Probe Delta Salt 50.9 degrees C F66.9 degrees C F60.0 degrees C 32.6 ug/A260 R 42.9 % -153.4 kCal/Mol -6.3 KCml/Mol 58.5 degrees -403.9 eu 6445.2 Analysis Oligonucleatide thermodynemic weight Ü 3' End Delta Absorbance Absorbance Persont GC Molecular Filter Tm AT+GC TO GC TH Delta H Dalta G Dalta

000 00000 2-oligo dimers 2-oligo bulges 2-oligo internals Structural Analysis Summary / palindromes loops hairpin loops bulge loops base runs internal dimers 0 P 0 0 E Number Number Number Number Number